

Before the
Federal Communications Commission
Washington, D.C. 20554

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COMMUNICATIONS COMMISSION
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In the Matter of)

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Amendment of Section 2.106 of the)
Commission's Rules to Allocate)
Spectrum at 2 GHz for Use)
by the Mobile-Satellite Service)

ET Docket No. 95-18

**Reply Comments of the Wireless Communications Division
of the Telecommunications Industry Association**

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1. Introduction

The Wireless Communications Division ("WCD") of the Telecommunications Industry Association ("TIA"), submits the following reply comments in the Federal Communications Commission's Third Notice of Proposed Rulemaking in ET Docket 95-18 ("Notice").¹ TIA is the principal industry association representing telecommunications equipment manufacturers and suppliers, including manufacturers of terrestrial mobile radio equipment.²

In its initial comments, WCD supported the decision of the Commission to reallocate the spectrum at 2110-2150 MHz and it commended the Commission for its

¹ Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, Memorandum Opinion and Order and Third Notice Of Proposed Rule Making and Order, FCC 98-309 (Released November 27, 1998) ("Notice").

² These comments reflects only the views of members of the TIA Wireless Communications Division. Moreover, these comments do not necessarily reflect the views of other divisions, other committees, or other members of TIA.

decision to seek public comment on what services might most appropriately be offered in that spectrum band. As a result of the Commission's initiation of this proceeding, WCD withdrew its Petition for Rulemaking which proposed allocating this spectrum to a broadband Personal Communications Services ("PCS") service, *i.e.*, International Mobile Telecommunication - 2000 ("IMT-2000"). WCD incorporated the essence of its petition into its initial comments and from the responses generated in the rulemaking to date WCD is reinforced in its belief that this is the appropriate proceeding for these issues to be addressed.

WCD firmly believes that IMT-2000 will be a significant worldwide communications service in the very near future. It is an important integrated, multimedia, communications transport environment containing fixed, mobile and satellite components with data speeds ranging from 144 kbps to 2 Mbps depending on the application. WCD expects that it will be utilized in Asia in the near future and soon thereafter in Europe. Thus, allocating adequate spectrum for this service in the United States should be among the Commission's highest priorities.

In its Notice, the Commission indeed suggested that among the potential users of this spectrum might be IMT-2000.³ WCD believes that the comments filed in the rulemaking so far demonstrate that it is in the public interest to allocate the 2110 – 2150 MHz spectrum specifically for IMT-2000 services (also known as 3G services or 3rd generation wireless). We recognize, however, that the Commission may not yet believe that it has developed an adequate record to resolve the allocation issue in the instant Notice. If this is the case, we recommend that the Commission issue a further (fourth)

³ See *Id.* at ¶ 30.

notice which can explore fully all the technical and administrative issues associated with an allocation of the spectrum for IMT-2000 services.

2. The Commercial Mobile Telecommunications Industry Recognizes that 2110 - 2150 MHz is Appropriate Spectrum for IMT-2000.

WCD supports the comments filed in this docket by the Personal Communications Industry Association ("PCIA"), a major trade association representing the interests of the commercial and private mobile radio service communications industries and the fixed broadband wireless industry. PCIA stated in its comments that 3G technology cannot "be fully and most effectively implemented in the spectrum now available" ⁴ PCIA recognizes that the 2110-2150 MHz band is particularly well-suited for 3G applications. PCIA noted, as WCD did also, "that these frequencies are part of the band allocated on an international basis for IMT 2000 services" ⁵

PCIA pointed out that the proximity of this spectrum to the existing PCS band promises economies in equipment manufacturing "that will benefit both consumers and the providers of mobile wireless services." ⁶ WCD urges the Commission to give careful consideration to the opinions of this association which has extensive experience with and knowledge of the commercial wireless industry and represents the views of numerous wireless operators and wireless industry organizations.

WCD also endorses the comments of Telephone and Data Systems, Inc. ("TDS"), a diversified telecommunications services company with cellular telephone, local telephone, PCS and other wireless operations. TDS points out that the record developed

⁴ Comments of the Personal Communications Industry Association at 3.

⁵ *Id.*

⁶ *Id.* at 3-4.

in the Commission's Third-Generation Wireless Public Notice demonstrates that far more than 40 MHz will be required for future IMT-2000 systems. WCD shares the opposition of TDS to the allocation of this spectrum for other services, such as the Broadcast Auxiliary Services, because it would "needlessly compromise and create technical uncertainties regarding the spectrum efficient operations of IMT-2000 systems."⁷

3. IMT-2000 Services are Particularly Appropriate for 2110 - 2150 MHz.

WCD notes that the Wireless Communications Association International, Inc. ("WCA") believes that the 2110 - 2150 MHz spectrum should be allocated generally to Fixed and Mobile so that its members may use it to provide fixed broadband services.⁸

TIA, like WCA, supports the efforts of the Commission to advance the principles of Section 706 of the Telecommunications Act to bring broadband video, voice, and data services to the American people. On the other hand, TIA has long been an advocate of responsible spectrum management.⁹ TIA believes that the FCC has the responsibility to evaluate the spectrum landscape and determine if one use for a particular portion of the spectrum makes more sense from a technical and regulatory perspective than other uses.

In the recent NPRM proposing to allocate the spectrum from 3650-3700 MHz for fixed services the FCC has done just that.¹⁰ The Commission has examined the existing users on and adjacent to this spectrum and has determined that a mobile allocation would be inappropriate and, therefore, has proposed a fixed allocation. What WCD proposes in

⁷ Comments of Telephone and Data Systems, Inc. at 2.

⁸ Comments of the Wireless Communications Association International, Inc at 3-4

⁹ See TIA Spectrum Management Policy at www.tiaonline.org

¹⁰ See *Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band*, ET Docket 98-237, *Notice of Proposed Rule Making*, released December 18, 1998, 64 Fed. Reg. 2462 (1999).

this case is similar. WCD asks the Commission, before allocating this spectrum, to take note of the technical and regulatory conditions and act accordingly.

From a technical point of view, the spectrum below 3 GHz has characteristics that are more conducive for mobile applications than spectrum above 3 GHz. This is not as critical for fixed applications. Therefore, the Commission should take note of the fact that this spectrum is appropriate for addressing the spectrum needs of mobile systems.

From a regulatory point of view, WCD asked the Commission to note that internationally this spectrum has been allocated for IMT-2000 services. WCA stated that International Telecommunication Union ("ITU") designation of bands "does not preclude the use of these bands by other services to which these bands are allocated."¹¹ WCD never said that the ITU designation required the FCC to do anything. What WCD said is, in the real world, every other major market has followed the ITU designation. The US may, of course, continue to pursue a separate path, but it does so at a cost - to its consumers and to U.S. operators.

It is these two facts, taken together, which argue for the FCC to designate this spectrum for IMT-2000 services. As part of an international process to estimate the spectrum needs of commercial mobile systems, US Task Group 8/1 has estimated that by the year 2010 the total Commercial Mobile Radio Service ("CMRS") spectrum need will be approximately 390 MHz.¹² The estimates from other regions of the world are even higher than this.

There is a consensus, therefore, that third-generation services will require more spectrum than is currently allocated to commercial wireless services in the US. It is also

¹¹ WCA comments at 8-9.

¹² United States of America Proposed Revision to TEMP DOC. 8-1/112, Draft IMT-2000 CPM-99 Text.

a technical fact that allocations of additional spectrum to fill this need should come from spectrum which is below 3 GHz. And finally, WCD would also stress that a decision regarding this spectrum which aligns its use with the spectrum determinations of other nations will benefit both US consumers and US manufacturers. It is for these reasons that WCD asks the Commission to allocate the spectrum to IMT-2000 services.

One final note on the question of mobile versus fixed services. An allocation which requires that a 3G technology be deployed in the bands does not stop a carrier from offering a fixed service in the band, just as fixed services are deployed in the PCS bands. It does, however, provide confidence to the operators that the technologies which will be deployed in this band will be compatible with IMT-2000 systems, whether fixed or mobile.

WCA has advanced the argument that this spectrum is not needed for IMT-2000 because "Japanese, Koreans, and Europeans have all identified approximately 120 MHz in two 60 MHz bands as appropriate for IMT-2000. This is precisely the amount of spectrum allocated for PCS in the United States."¹³ This is misleading. The European allocation of 120 MHz for IMT-2000 comes in addition to its 1710-1785/1805-1880 MHz allocation of 150 MHz of spectrum for 2nd generation services [DCS 1800, i.e. , General System for Mobile ("GSM")]. Europe has also allocated 20 MHz (1880-1900 MHz) for unlicensed Time Division Duplex ("TDD") operation [Digital European Cordless Telephone ("DECT")]. Thus, while the ITU has designated 120 MHz of spectrum for IMT-2000, and the spectrum has been allocated in Europe and Region III, the European delegations have been the most adamant in supporting additional IMT-2000 spectrum at WRC '00.

Despite these very relevant developments internationally, WCA would have the United States force its 2G spectrum to accommodate all IMT-2000 uses, an extreme position for which WCA offers no justification.


4. Conclusion

As WCD stated in its initial comments in this proceeding, the stated public policy goal of making advanced telecommunications services available to the American people on a “reasonable and timely basis”¹⁴ can be advanced by wise spectrum management decisions. Designating the 2110-2150 MHz band for IMT-2000 services will not only make U.S. technology more exportable to the rest of the world, but will, more importantly, put the economies of scale available in a worldwide market to work for American consumers. WCD believes that it is in the public interest to allocate the 2110 – 2150 MHz spectrum specifically for IMT-2000 services. If the Commission is not prepared to resolve the allocation issue in the instant Notice, WCD recommends that the Commission issue a further notice to explore fully any unresolved technical or administrative issues associated with the allocation of the spectrum for IMT-2000 services.

¹³ WCA Comments at 9.

¹⁴ See 47 U.S.C. § 706(a).

Respectfully submitted,
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